

Name _____

Estimating Products

P 5-2

Estimate each product.

- | | |
|---|--|
| 1. 7×42 is close to $7 \times$ _____ | 2. 9×511 is close to $9 \times$ _____ |
| 3. 5×79 _____ | 4. 6×32 _____ |
| 5. 4×63 _____ | 6. 8×102 _____ |
| 7. 9×354 _____ | 8. 3×428 _____ |
| 9. 7×493 _____ | 10. 5×814 _____ |
| 11. $2 \times 3,541$ _____ | 12. 8×783 _____ |
13. A dog weighs 27 lb. A football player weighs 9 times as much as the dog. About how many pounds does the football player weigh?

14. Nyesha has 872 stamps in her stamp collection. Her mother has 8 times as many stamps. About how many stamps does Nyesha's mother have?

Test Prep

15. Alma traveled 324 mi to visit her grandmother. Kevin traveled 5 times as far to see his uncle. About how many miles did Kevin travel?
- A. 150 mi B. 1,500 mi C. 6,000 mi D. 15,000 mi
16. **Writing in Math** Lana found the exact answer to 6×623 . Her exact answer was less than her estimate of 3,600. Is Lana's exact answer correct? Explain.

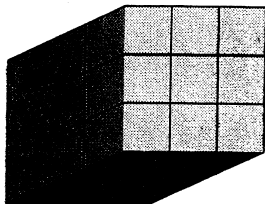
Name _____

Block Party

E 5-3
VISUAL THINKING

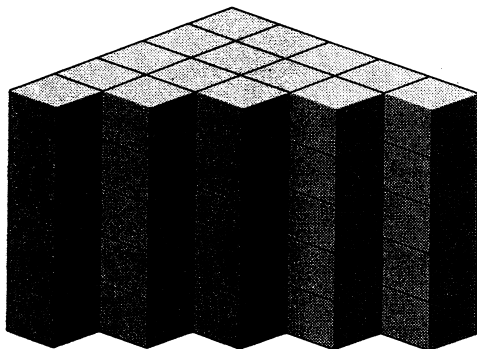
Find the pattern of blocks in each structure. Then write the total number of blocks.

1. There are 3 levels.



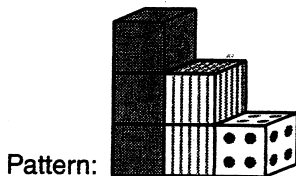
Total number of blocks: _____

2. There are 5 levels.



Total number of blocks: _____

3. Copy the pattern of 3 shaded blocks, 2 spotted blocks, and 1 striped block. Repeat this pattern to draw a side view of a staircase with 12 shaded blocks, 8 striped blocks, and 4 spotted blocks.



Multiplying Two-Digit and One-Digit Numbers

PS 5-5

Olympic Records The chart shows men's Olympic records for several events. The records are rounded to the nearest meter.

Men's Olympic Records

Event	Record (in meters)
Hammer throw	85
Shot put	22
Javelin throw	90
Long jump	9

1. What is 6 times the record distance for the hammer throw?

2. What is 8 times the record distance for the shot put?

3. What is 27 times the record distance for the long jump? _____

4. Which is greater, 6 times the distance of the record javelin throw or 7 times the distance of the record hammer throw?

5. The shoelace for a basketball player's shoe is 32 in. long. How many inches of shoelace are used for 4 shoes? _____

6. A regulation football field is about 53 yd wide. How many yards wide would 9 fields be? _____

7. **Writing in Math** A regulation-size baseball bat is 34 in. long. Tim said that if you lined 9 bats end to end, they would measure more than 300 inches. Is Tim correct? Explain.

Name _____

P 5-6

Multiplying Three-Digit and One-Digit Numbers

Find each product. Estimate for reasonableness.

1.
$$\begin{array}{r} 352 \\ \times 3 \\ \hline \end{array}$$

2.
$$\begin{array}{r} 385 \\ \times 4 \\ \hline \end{array}$$

3.
$$\begin{array}{r} 482 \\ \times 8 \\ \hline \end{array}$$

4.
$$\begin{array}{r} 632 \\ \times 5 \\ \hline \end{array}$$

5.
$$\begin{array}{r} 219 \\ \times 6 \\ \hline \end{array}$$

6.
$$\begin{array}{r} 768 \\ \times 7 \\ \hline \end{array}$$

7.
$$\begin{array}{r} 521 \\ \times 4 \\ \hline \end{array}$$

8.
$$\begin{array}{r} 848 \\ \times 9 \\ \hline \end{array}$$

9. $7 \times 211 =$ _____

10. $6 \times 517 =$ _____

If the baseball players in the table score the same number of runs each season, how many runs will

11. Player A score in 5 seasons?

12. Player C score in 8 seasons?

Runs Scored in 2001

Player	Runs Scored
A	128
B	113
C	142

Test Prep

13. How many bottles of water would Tim sell if he sold 212 bottles each week for 4 weeks?

A. 800

B. 840

C. 848

D. 884

14. **Writing in Math** If you know that $8 \times 300 = 2,400$, how can you find 8×320 ? Explain.

Try, Check, and Revise

Use the first try to help you make a second try. Finish solving the problem.

1. Anton put 35 marbles equally into 5 jars. Each jar holds either 5 large marbles or 7 small marbles. What size of marbles did Anton put into the jars?

$$\begin{array}{r} 5 \text{ jars} \\ \times 5 \text{ large marbles} \\ \hline 25 \end{array}$$

That's not enough.

Try, check, and revise to solve each problem. Write the answer in a complete sentence.

2. Lenore earned \$6 per hour and Dora earned \$8 per hour. Lenore and Dora worked the same number of hours. Lenore earned \$54. How much did Dora earn?

3. Thomas read 3 of the books. He read a total of 272 pages. Which of the books did he read?

Book	Pages
<i>Dark Mysteries</i>	87
<i>History of France</i>	146
<i>Superhero Stories</i>	72
<i>Artists to Know</i>	113

4. Heather read 2 of the books. She also read a music book with 211 pages. She read a total of 429 pages. Which of the books did she read?

Name _____

Choose a Computation Method

PS 5-8

Factory Brad owns a factory. His factory makes nails, screws, and tacks. The chart shows how many of each item his factory can make in an hour. Use mental math, paper and pencil, or a calculator to solve Exercises 1–3. Tell which computation method you used.

Item	Number Made per Hour
Nail	3,978
Screw	2,210
Tack	1,010

1. How many nails will the factory make in 4 hr?

2. How many screws will the factory make in 7 hr?

3. How many tacks will the factory make in 9 hr?

Furniture Romero and Tracy work as salespeople at a furniture store. The chart shows the average amount of money they bring into the store each month. Use mental math, paper and pencil, or a calculator to solve Exercises 4 and 5. Tell which computation method you used.

Salesperson	Furniture Sold per Month
Romero	\$5,100
Tracy	\$4,031

4. On average, how much money does Romero make in sales in 5 months?

5. On average, how much money does Tracy make in sales in 8 months?

6. **Writing in Math** Suppose 2,002 grains of sand go through an hourglass every 15 min. Which computation method would you use to find how many grains go through an hourglass in 1 hr? Explain?

Name _____

Multiplying Money

PS 5-9

School Supplies Rita went to a store with her mom to buy school supplies.

Item	Cost
Pen	\$0.49 each
Notebook	\$1.99 each
Binder	\$3.69 each
Folder	\$1.29 each

1. Rita bought 4 pens. How much did they cost?

2. Rita bought 6 notebooks. How much did they cost?

3. Rita bought 4 binders. How much did they cost?

4. Rita bought 5 folders. How much did they cost?

Hearts Shaniqua was interested in buying anything that had a heart on it. One day she found some key chains that had big, red hearts on them. The key chains cost \$2.69 each.

5. If Shaniqua decided to buy 5 key chains, how much would she spend?

6. Suppose Shaniqua only had \$10.00. What is the greatest number of key chains she could buy?

7. **Writing in Math** Explain how you found your answer to Exercise 6.

Name _____

Multiplying Three Factors

P 5-10

1. $2 \times 4 \times 9$

2. $9 \times 8 \times 3$

3. $4 \times 4 \times 10$

4. $6 \times 50 \times 2$

5. $8 \times 60 \times 5$

6. $20 \times 7 \times 3$

7. $2 \times 600 \times 5$

8. $80 \times 6 \times 2$

9. $4 \times 70 \times 4$

10. Show three ways to find $40 \times 2 \times 5$.

11. How many building blocks did Travis use to build his city?

Travis' Building Blocks
1 toy city = 4 buildings
1 building = 4 sides
1 side = 20 blocks

Test Prep

12. How many apples would you have altogether if you have 5 apples in each of 3 bowls on each of 4 tables?

A. 60 apples

B. 72 apples

C. 81 apples

D. 100 apples

13. **Writing in Math** What is the cost of a truckload of sand if there are 25 bags per truckload, 10 lb of sand per bag, and each pound of sand costs \$2? Show two different ways to solve the problem.

Name _____

PROBLEM-SOLVING SKILL

P 5-11

Choose an Operation

Draw a picture to show the main idea. Then choose an operation and solve the problem.

1. A sack of potatoes weighs 20 lb and holds 200 potatoes. A sack of apples weighs 20 lb and holds 325 apples. How many more apples are there in a 20 lb sack?

2. Shawna has 35 football cards and 5 times as many baseball cards in her sports-card collection. How many baseball cards does she have?

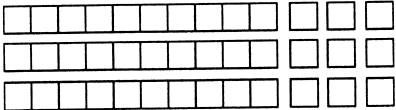
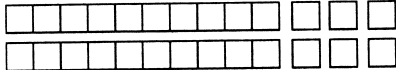
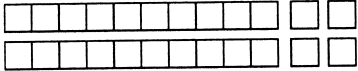
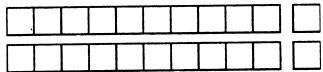
3. A pound of peaches costs \$1.29. How much does 4 lb of peaches cost?

4. The first modern electronic computer, called ENIAC, was introduced in 1946. Personal home computers were not available until 28 years later. In what year were personal home computers introduced?

Chapter 5 Review

Multiple Choice

Identify the letter of the choice that best completes the statement or answers the question.

- _____ 1. Find the product. Use mental math.
 $2 \times 8,000$
 a. 1,600,000 b. 160,000 c. 16,000 d. 1,600
- _____ 2. There are 2 boxes of paper clips. Each box contains 672 paper clips. ESTIMATE the total number of paper clips. Use rounding.
 a. 140 b. 1,200 c. 1,400 d. 120
- _____ 3. Which array represents 2×12 ?
- a. 
- b. 
- c. 
- d. 
- _____ 4. Which of these is another way to find 3×35 ?
- a. Add 3×30 and 3×5 .
 b. Multiply $3 \times 30 \times 5$.
 c. Add 30 and 5.
 d. Add 3 to the product of 30 and 5.

- _____ 5. An orchestra will give 5 performances in an auditorium that holds 450 people. In all, how many people can come to the performances?
a. 1,800 people b. 2,200 people c. 2,250 people d. 2,700 people
- _____ 6. Kelly has 39 nickels and dimes. She has twice as many nickels as dimes. How many nickels does she have?
a. 26 nickels c. 20 nickels
b. 13 nickels d. 78 nickels
- _____ 7. In basketball, a player can score 2 or 3 points for a field goal. A player scored 18 points with 7 goals. How many three-point goals did the player make?
a. 3 three-point goals c. 5 three-point goals
b. 25 three-point goals d. 4 three-point goals
- _____ 8. Which computation method would be best for finding $8 \times 6,000$?
a. Use a calculator. c. Use paper and pencil.
b. Use a number line. d. Use mental math.
- _____ 9. Sam was interested in finding the highest points in some states. He put the information he found in a table.

HIGHEST POINTS

State	Highest Point	Elevation
Georgia	Brasstown Bald	1,595 yd
North Carolina	Mount Mitchell	2,216 yd
Oklahoma	Black Mesa	1,658 yd
Florida	Britton Hill	114 yd
Alabama	Cheaha Mountain	802 yd

What is the height, in feet, of Cheaha Mountain? This is the highest point in Alabama.
(HINT: 1 yard = 3 feet)

- _____ 10. Javier is buying 2 pairs of gloves for \$8.20 a pair and 2 hats for \$5.70 each. What is the total cost before tax?
a. \$19.60 b. \$15.90 c. \$22.10 d. \$27.80
- _____ 11. Which product is NOT the same as $3 \times 8 \times 7$?
a. 15×3 b. 21×8 c. 24×7 d. 56×3
- _____ 12. There are 60 seconds in one minute. Which operation would you use to find the number of seconds in 8 minutes?
a. addition c. subtraction
b. division d. multiplication

Numeric Response

13. What is the total cost for 5 bags of fruit if each bag costs \$3.66?

$$\begin{array}{r} \$3.66 \\ \times 5 \\ \hline \end{array}$$

\$

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Write your answer in the answer boxes at the top of the grid at the right. Fill in one bubble under each box in which you wrote your answer.

14. Find the product.

$$2 \times 100 \times 8$$

Write your answer in the answer boxes at the top of the grid at the right. Fill in one bubble under each box in which you wrote your answer.

0	0	0	0
1	1	1	1
2	2	2	2
3	3	3	3
4	4	4	4
5	5	5	5
6	6	6	6
7	7	7	7
8	8	8	8
9	9	9	9

Other

15. Draw an array to find 2×12 . What is the product?

Show All Work

Product _____